

## ABSTRACT OF THE DISCLOSURE

1           A potentiometric measuring probe contains an  
2 electrolyte (110) as well as a primary reference element  
3 (106) and a secondary reference element (108) that are  
4 arranged so that the front (148) of an electrolyte  
5 deficiency advancing from an opening (112) of the measuring  
6 probe arrives at the secondary reference element before it  
7 arrives at the primary reference element. The potential  
8 difference existing between the primary reference element  
9 and the secondary reference element is monitored, and when a  
10 predefined tolerance criterion is found to be violated, the  
11 elapsed operating time from the point when the measuring  
12 probe was put into operation is determined and used as a  
13 basis for calculating the remaining operating time of the  
14 measuring probe.

(Figure 2)